

<u>LESSON PLAN</u>			
Name of the Faculty	RENU BALA		
Discipline	ELECTRICAL ENGINEERING		
Semester	3rd		
Subject	EMII		
Lesson Plan Duration	15 WEEKS (From August 2026 to November 2026)		
Work Load (Lecture/ Practical) per week (in hours)	Theory- 04		
	Practical :2		
Week	Theory		Date/ Signature
	Lecture Day	Topic	
1st	1st	(a) Introduction to the Subject; (b) Introduction of the nature of the examination and marks distribution of different topics	
	2nd	Concept of measurement and instruments	
	3rd	Concept of measurement of electrical quantities and instruments for their measurements, sources of error.	
	4th	Types of electrical measuring instruments – indicating, integrating and recording type instruments	
2nd	1st	Essentials of indicating instruments – deflecting, controlling and damping torque	
	2nd	Test of chapter 1	
	3rd	Concept of ammeter and voltmeters and difference between them	
	4th	Construction and working principles of moving Iron and moving coil instruments	
3rd	1st	Merits and demerits, sources of error and application of these instruments	
	2nd	Test of chapter 2	
	3rd	Construction, working principle, merits and demerits of dynamometer type wattmeter, Digital wattmeters.	
	4th	Continued	
4th	1st	Test of chapter 3	
	2nd	Energymeter : Induction Type	
	3rd	Construction, working principle, merits and demerits of single-phase and three-phase energy meters	

	4th	Errors and their compensation	
5th	1st	Simple numerical problems	
	2nd	Construction and working principle of maximum demand indicators	
	3rd	Digital energy meter (diagram, construction and application)	
	4th	Test of chapter 4	
6th	1st	Construction, working principle and application of Meggar, Earth tester(analog and digital) Multimeter	
	2nd	Frequency meter (dynamometer type) single phase power factor meter (Electrodynamometer type)	
	3rd	Working principle of synchroscope and phase sequence indicator	
	4th	Tong tester (Clamp-on meter)	
7th	1st	Instrument Transformers: Construction, working and applications : CT	
	2nd	Continued	
	3rd	Instrument Transformers: Construction, working and applications : PT	
	4th	Continued	
8th	1st	Test of chapter 5	
	2nd	Cathode Ray Oscilloscope: Block diagram	
	3rd	Working principle of CRO and its various controls.	
	4th	Continued	
9th	1st	Applications of CRO.	
	2nd	Digital multi-meter (only block diagram) and Applications	
	3rd	Continued	
	4th	Continued	
10th	1st	Test of chapter 6	
	2nd	Study of LCR meters	
	3rd	Continued	
	4th	Applications of LCR	
11th	1st	Continued	
	2nd	Test of chapter 7	
	3rd	Two wattmeter method in balanced circuits	
	4th	Continued	
12th	1st	Two wattmeter method in unbalanced circuits	
	2nd	simple problems	
	3rd	Three wattmeter method	

	4th	Continued	
13th	1st	Quiz	
	2nd	Introduction, Types of Transducers	
	3rd	1&3 phase Transducers	
	4th	Basic concept of pressure measurement	
14th	1st	Flow measurement,	
	2nd	level measurement	
	3rd	displacement measurement using transducers	
	4th	Different types of thermometers, thermocouple, resistance	
15th	1st	Continued	
	2nd	temperature detector and their construction	
	3rd	principle and working TD	
	4th	Thermal Imager Camera	

